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Your ref: Project Number 740  
Our ref: DCP/NRC1760

July 7, 2006

Subject: AP1000 COL Standard Technical Report Submittal

Subject: AP1000 COL Standard Technical Report Submittal of Sensitive and Non-Sensitive Versions of APP-GW-GLR-033, Revision 0

In support of Combined License application pre-application activities Westinghouse is submitting AP1000 Standard Combined License Technical Report Number 54. This report completes and documents, on a generic basis, activities required for COL Information Item 9.1-3 in the AP1000 Design Control Document. This report is submitted as part of the NuStart Bellefonte COL Project (NRC Project Number 740). The information included in this report is generic and is expected to apply to all COL applications referencing the AP1000 Design Certification.

Technical Report 54 also includes design changes to the spent fuel racks and associated Design Control Document changes for storage of a larger number of spent fuel assemblies in the spent fuel pool.

The purpose for submittal of this report was explained in a March 8, 2006 letter from NuStart to the NRC.

Pursuant to 10 CFR 50.30(b), APP-GW-GLR-033, Revision 0, "Spent Fuel Storage Rack Structure/Seismic Analysis," (Technical Report Number 54), is submitted as Enclosure 1 under the attached Oath of Affirmation. Enclosure 1 contains sensitive material relative to the physical protection of an AP1000 Nuclear Plant that should be withheld from public disclosure pursuant to 10 FR 2.390(d). Enclosure 2 is the redacted version of Enclosure 1 with the sensitive material relative to the physical protection of an AP1000 Nuclear Plant withheld from public disclosure pursuant to 10 CFR 2.390(d).

It is expected that when the NRC review of Technical Report Number 54 is complete, the portion of COL Information Item 9.1-3 requiring a confirmatory structural dynamic and stress analysis of the spent fuel racks, will be considered complete for COL applicants referencing the AP1000 Design Certification. The engineering calculation documenting the stress analysis and other design calculations and analyses are available for NRC review or audit at the Westinghouse offices. The portion of COL Information Item 9.1-3 requiring reconciliation of load imposed by the spent fuel rack on the spent fuel pool structure will be addressed later in a COL technical report documenting the reconciliation of nuclear island critical sections.

Westinghouse is hereby requesting review and approval of the design changes associated with the change in the number of spent fuel assemblies held by the spent fuel rack.

Questions or requests for additional information related to content and preparation of this report should be directed to Westinghouse. Please send copies of such questions or requests for additional information to the prospective applicants for combined licenses referencing the AP1000 Design Certification. A representative for each applicant is included on the cc: list of this letter.

Very truly yours,



A. Sterdis, Manager  
Licensing and Customer Interface  
Regulatory Affairs and Standardization

/Attachment

1. "Oath of Affirmation," dated July 7, 2006

/Enclosures

1. APP-GW-GLR-033, Revision 0, "Spent Fuel Storage Rack Structure/Seismic Analysis," Technical Report Number 54, Sensitive Version
2. APP-GW-GLR-033, Revision 0, "Spent Fuel Storage Rack Structure/Seismic Analysis," Technical Report Number 54, Non-Sensitive Version

|     |             |                         |    |    |
|-----|-------------|-------------------------|----|----|
| cc: | S. Bloom    | - U.S. NRC              | 1E | 1A |
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|     | E. Schmiech | - Westinghouse          | 1E | 1A |
|     | G. Zinke    | - NuStart/Entergy       | 1E | 1A |

**ATTACHMENT 1**

**“Oath of Affirmation”**

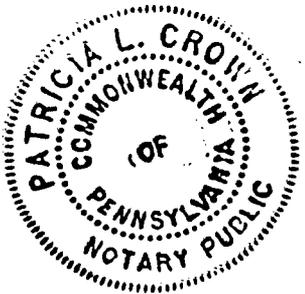
ATTACHMENT 1

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of: )  
NuStart Bellefonte COL Project )  
NRC Project Number 740 )

APPLICATION FOR REVIEW OF  
"AP1000 GENERAL COMBINED LICENSE INFORMATION"  
FOR COL APPLICATION PRE-APPLICATION REVIEW

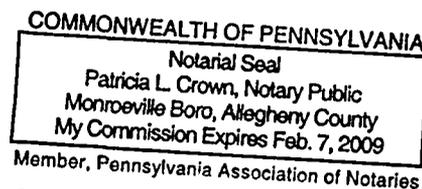
Bruce W. Bevilacqua, being duly sworn, states that he is Vice President, New Plants Engineering, for Westinghouse Electric Company; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission this document; that all statements made and matters set forth therein are true and correct to the best of his knowledge, information and belief.



*Bruce W. Bevilacqua*

Bruce W. Bevilacqua  
Vice President  
New Plants Engineering

Subscribed and sworn to  
before me this *7th* day  
of July 2006.



*Patricia L. Crown*  
Notary Public